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(21) International Application Number: PCT/US97/15124 (22) International Filing Date: 28 August 1997 (28.08.97) (30) Priority Data: 08/705,458 29 August 1996 (29.08.96) US (71) Applicant: THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US). (72) Inventors: MEHANSHO, Haile; 7 Highknoll Court, Fairfield, OH 45014 (US). MELLICAN, Renee, Irvine; 71 Towne Commons Way, No. 32, Cincinnati, OH 45251 (US). TRINH, Toan; 8671 Creekwood Lane, Maineville, OH 45039 (US). (74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: USE OF BILAYER FORMING EMULSIFIERS IN NUTRITIONAL COMPOSITIONS COMPRISING DIVALENT METAL SALTS		
(57) Abstract Nutritional composition comprising an edible carrier comprising an emulsifier capable of forming a bilayer structure (a vesicle or liposome) and a divalent mineral salt (Fe, Ca, Zn, Cu, Mg, Mn) on the carrier. In particular claimed nutritional iron compositions comprising bioavailable sources of iron selected from ferrous fumarate and ferrous succinate where the iron source is preferably spread on the surface of a lecithin coated edible carrier such as sucrose. These nutritional iron compositions are particularly useful in food and beverage products such as chocolate flavored edible mixes, especially chocolate flavored beverages, that are additionally fortified with other minerals and vitamins, especially multi-mineral and vitamin combinations involving, iodine, vitamin A, vitamin C, riboflavin, and folic acid to avoid developing an undesirable color, off-flavor, astringency, particularly when the edible and/or beverage mix is reconstituted with water or milk.		